

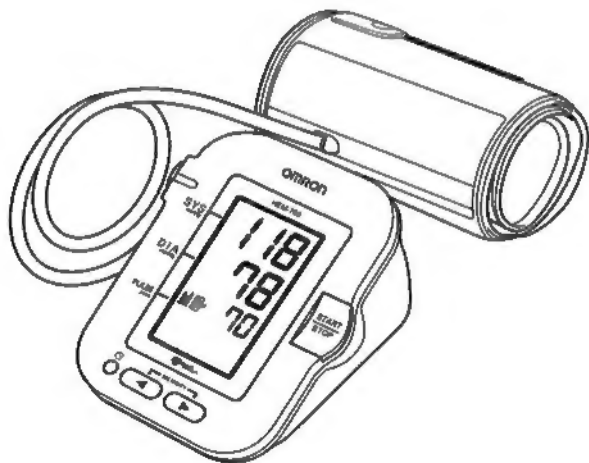
# OMRON®

## INSTRUCTION MANUAL



### Automatic Blood Pressure Monitor with ComFit™ Cuff

Model **HEM-780**



ENGLISH

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## INTRODUCTION

Thank you for purchasing the Omron HEM-780 IntelliSense® Automatic Blood Pressure Monitor with the ComFit™ Cuff.

*Fill in for future reference.*

DATE PURCHASED: 6-21-06

SERIAL NUMBER: 57062914

*Staple your purchase receipt here*

Your new digital blood pressure monitor uses the oscillometric method of blood pressure measurement. This means the monitor detects your blood movement through your brachial artery and converts the movements into a digital reading. An oscillometric monitor does not need a stethoscope so the monitor is simple to use.

The HEM-780 comes with the following components:

- Monitor
- ComFit™ Cuff
- AC Adapter
- 4 “AA” Batteries
- Storage Case
- Instruction Manual printed in English and Spanish

The HEM-780 IntelliSense® Automatic Inflation Blood Pressure Monitor is intended for home use.

## SAVE THESE INSTRUCTIONS

## IMPORTANT SAFETY NOTES

To assure the correct use of the product basic safety measures should always be followed including the precautions listed below:

- ☒ Read all information in the instruction book and any other literature included in the box before using the unit.
- ☒ Contact your physician for specific information about your blood pressure. Follow the instructions of your healthcare provider.
- ☒ Operate the unit only as intended. Do not use for any other purpose.
- ☒ The unit is intended for use in measuring blood pressure and pulse rate in adult patient population. Do not use on infants or persons who cannot express their intentions.
- ☒ Do not use a cellular phone near the unit. It may result in operational failure.
- ☒ Do not plug or unplug the adapter power cord with wet hands.
- ☒ Changes or modifications not approved by Omron Healthcare will void the user warranty. Do not disassemble or attempt to repair the unit or components.

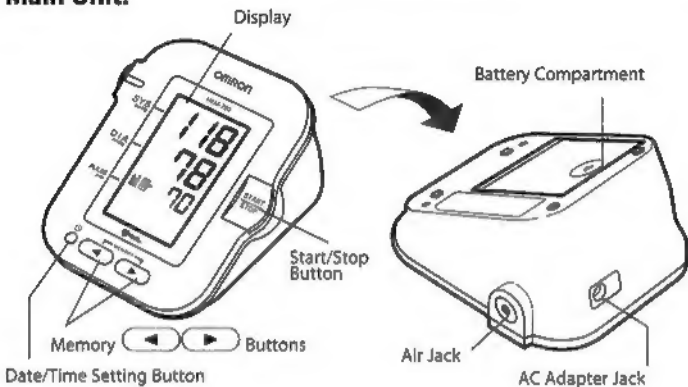
## **BEFORE TAKING A MEASUREMENT**

To ensure a reliable reading follow these recommendations:

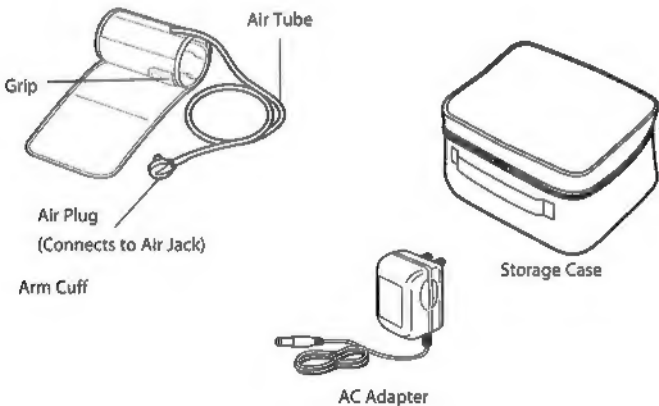
1. Avoid eating, smoking, and exercising for 30 minutes before taking a measurement. Rest for at least 15 minutes before taking the measurement.
2. Stress raises blood pressure. Avoid taking measurements during stressful times.
3. Measurements should be taken in a quiet place.
4. Remove tight-fitting clothing from your left arm.
5. Sit in a chair with your feet flat on the floor. Rest your left arm on a table so that the cuff is at the same level as your heart.
6. Remain still and do not talk during the measurement.
7. Keep a record of your blood pressure and pulse readings for your physician. A single measurement does not provide an accurate indication of your true blood pressure. You need to take and record several readings over a period of time. Try to measure your blood pressure at the same time each day for consistency.
8. Wait 2-3 minutes between measurements. The wait time allows the arteries to return to the condition prior to taking the blood pressure measurement. You may need to increase the wait time depending on your individual physiological characteristics.

# KNOW YOUR UNIT

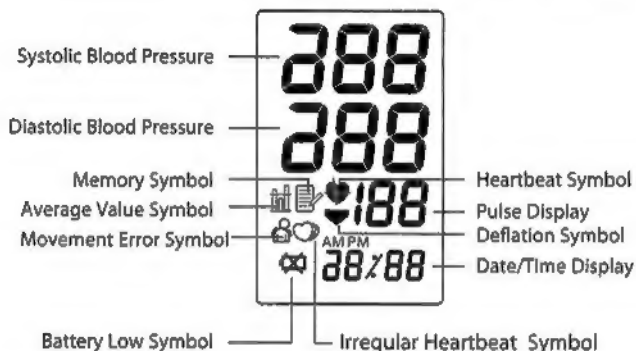
## Main Unit:



## Components:



# UNIT DISPLAY

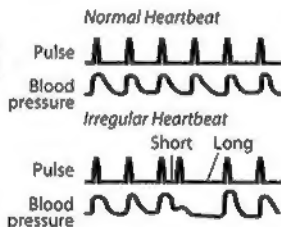


## IRREGULAR HEARTBEAT SYMBOL

When the monitor detects an irregular rhythm two or more times during the measurement, the Irregular Heartbeat Symbol (⚡) will appear on the display with the measurement values.

The irregular heartbeat rhythm is defined as a rhythm that varies by more than or less than 25% from the average rhythm detected while the monitor is measuring the systolic and diastolic blood pressure.

If the irregular heartbeat symbol (⚡) displays with your measurement results we recommend you consult your physician. Follow the directions of your doctor.

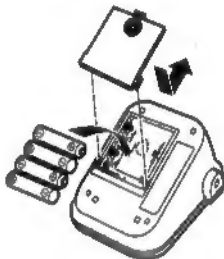


# BATTERY INSTALLATION

1. Press the ▼ indicator on the battery cover and slide the cover off in the direction of the arrow.



2. Install 4 "AA" size batteries so the + (positive) and - (negative) polarities match the polarities of the battery compartment as indicated.



3. Replace the battery cover.

## BATTERY REPLACEMENT

### Low Battery Indicator

When the Low Battery Indicator appears on the display screen remove all the batteries. Replace with four new batteries at the same time. Long-life alkaline batteries are recommended.

**NOTE:** Measurement values stored in the memory will not be deleted during battery replacement.

After replacing the batteries, reset the date and time.

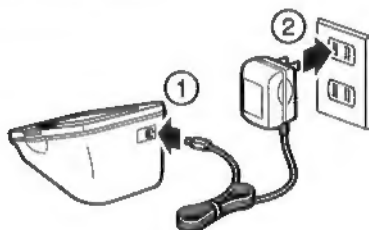
Refer to page 10, Setting the Date and Time.



## USING THE AC ADAPTER

Use only the authorized Omron AC Adapter, Model Number HEM-ADPT1, with this monitor. Use of any other adapter may cause damage to the monitor and will void the user warranty.

### To connect the AC Adapter



- ① Insert the AC Adapter Plug into the AC Adapter Jack on the back side of the monitor as illustrated.
- ② Plug the AC Adapter into a 120V AC outlet (60 cycles).

To disconnect the AC Adapter remove the AC Adapter from the electrical outlet first and then remove the AC Adapter Plug from the monitor.

**NOTE:** The monitor is designed not to draw power from the batteries when the AC Adapter is used.

# SETTING THE DATE AND TIME

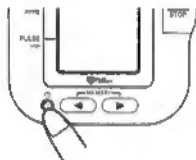
The Blood Pressure Monitor automatically stores up to 90 measurement values with the date and time. The monitor also calculates an average reading based on the last three measurement values.

Set the monitor to the current date and time before taking a measurement for the first time. If the current date and time is not set, a default date and time will display.

## 1. TO START THE SETTING


Press the Date/Time Setting button to adjust the date and time.

The year flashes on the display.



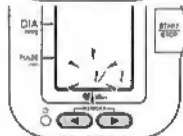
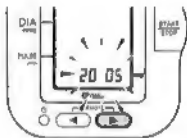
## 2. SETTING THE YEAR


The year can be set between 2004 and 2030. When the display reaches 2030, it will return to 2004.

Press the  MEMORY up button to advance by increments of one year.

Press the Date/Time Setting button to set the current year.

The month flashes on the display.



**NOTES:** • Press the  MEMORY down button to decrease the day and time values by increments of one.

- Press and hold the MEMORY up button to increase or memory down button to decrease the date and time values faster.

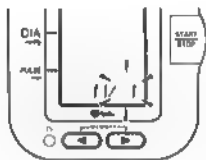
# SETTING THE DATE AND TIME

## 3. SETTING THE MONTH

Press the  MEMORY up button to advance by increments of one month.

Press the Date/Time Setting button to set the current month.

The day flashes on the display.

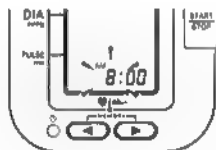


## 4. SETTING THE DAY

Press the  MEMORY up button to advance by increments of one day.

Press the Date/Time Setting button to set the current day.

The hour flashes on the display.



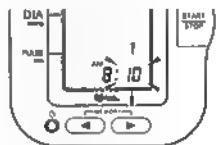
## 5. SETTING THE HOUR

The time is set using AM or PM.

Press the  MEMORY up button to advance by increments of one hour.


Press the Date/Time Setting button to set the current hour.

The minutes flash on the display.



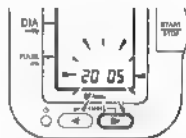
# SETTING THE DATE AND TIME

## 6. SETTING THE MINUTE

Press the  MEMORY up button to advance by increments of one minute.

Press the Date/Time Setting button to set the current minute.

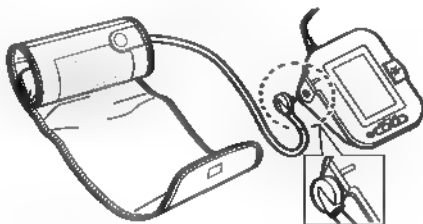
The year flashes on the display.



7. Press the START/STOP button to turn the display off.

# APPLYING THE ARM CUFF

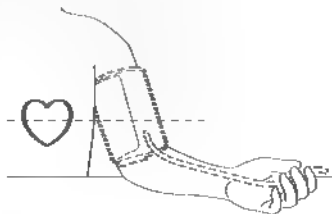
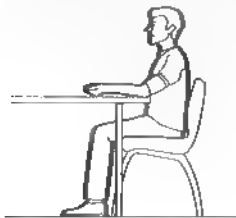
1. Make sure the air plug is securely inserted in the main unit.



2. Remove tight-fitting clothing from your upper arm.

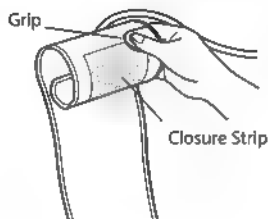


3. Sit in a chair with your feet flat on the floor. Place your arm on a table so the cuff is level with your heart.



# APPLYING THE ARM CUFF

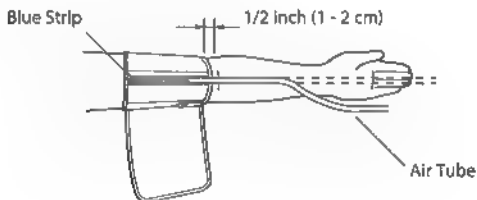
4. Hold the grip on the cuff securely with your hand.



5. Turn the palm of your hand upward.



6. Apply the cuff to your left upper arm so the blue strip is on the inside of your arm and aligned with your middle finger. The air tube runs down the inside of your arm. The bottom of the cuff should be approximately 1/2" above your elbow.



## APPLYING THE ARM CUFF

7. Wrap the cuff firmly in place around your arm using the closure strip.



### APPLYING THE CUFF ON THE RIGHT ARM

When taking a measurement using the right arm use this instruction for Step 6.

Apply the cuff to your right upper arm so the grip is centered on the inside of your inner arm. The bottom of the cuff should be approximately 1/2" above your elbow.



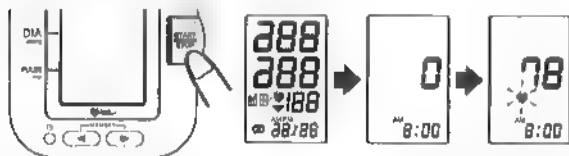
**NOTE:** Be careful not to rest your arm on the air tube. This will restrict the flow of air to the cuff

# TAKING A MEASUREMENT

The monitor automatically determines your ideal inflation level. In rare circumstances when a higher inflation may be necessary, the monitor automatically re-inflates the cuff up to 30 mmHg higher than the initial inflation and restarts the measurement.

## 1. Press the **START/STOP** button.

All display symbols appear on the screen. The cuff starts to inflate automatically.



**NOTE:** To stop the inflation or measurement, push the **START/STOP** button. The monitor will stop inflating, start deflating, and will turn off.

## 2. Inflation stops automatically and the measurement is started.

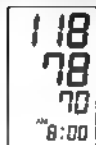
As the cuff deflates, decreasing numbers appear on the display. The Heart Symbol (♥) flashes at every heartbeat.





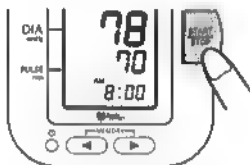
## TAKING A MEASUREMENT

3. When the measurement is complete, the arm cuff completely deflates. Your blood pressure and pulse rate are displayed.



4. Press the **START/STOP** button to turn the monitor off.

**NOTE:** The monitor will automatically turn off after five minutes.



## INSTRUCTIONS FOR SPECIAL CONDITIONS

If your systolic pressure is known to be more than 220 mmHg, press and hold the **START/STOP** button until the monitor inflates 30 to 40 mmHg higher than your suspected systolic pressure.



### NOTES:

- Do not apply more pressure than necessary.
- The monitor will not inflate above 299 mmHg.

# USING THE MEMORY FUNCTION


Every time you complete a measurement the monitor stores the blood pressure and pulse rate in the memory. The Blood Pressure Monitor automatically stores up to 90 measurement values. When 90 sets of measurement values are stored in the memory, the oldest record is deleted to save the most recent measurement values.

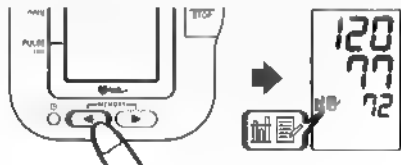
The monitor also calculates an average reading based on the values of the three most recent measurements taken. If the date and time is not set, the measurement values will not be stored in the memory correctly.

## TO DISPLAY THE AVERAGE VALUE



Average Value Symbol

1. Press the  MEMORY down button. The average value symbol will display on the screen with the average reading.



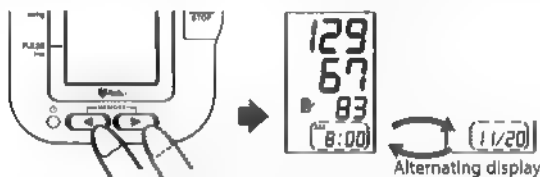
# USING THE MEMORY FUNCTION

## TO DISPLAY THE MEASUREMENT VALUES

The date and time is alternately displayed with the measurement values.

1. Press the  **MEMORY down button** to display the most recent measurement values on the screen.

Press the  **MEMORY up button** to display the oldest measurement values.



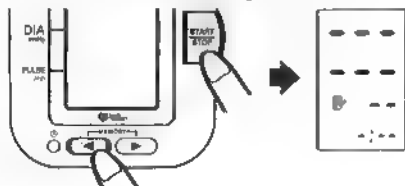
- NOTES:**
- Press the button repeatedly to display the next values.
  - Press and hold the button to display the values faster.

2. Press the **START/STOP** button to turn the power off.

## TO DELETE ALL VALUES STORED IN THE MEMORY

You cannot partially delete records stored in the memory.  
All records will be deleted.

1. Press and hold the  **MEMORY down button** and **START/STOP** button simultaneously for more than 2 seconds.



## CARE AND MAINTENANCE

To keep your digital blood pressure monitor in the best condition and protect the unit from damage follow the directions listed below:

**Keep the monitor in the storage case** when not in use. Make sure the AC Adapter is placed under the main unit so that it does not damage the display.

**Do not forcefully bend** the arm cuff or air tube. Do not fold tightly.

**Clean the monitor with a soft dry cloth.**

Do not use any abrasive or volatile cleaners.

Do not attempt to clean the cuff. Never immerse the monitor or any components in water.

**Store the monitor in a safe and dry location.** Do not subject the monitor to extreme hot or cold temperatures, humidity and direct sunlight.






**Avoid subjecting the monitor to strong shocks,** such as dropping the unit on the floor.

**Remove the batteries** if the unit will not be used for three months or longer. Always replace all the batteries with new ones at the same time.

**Use the unit consistent with the instruction provided in this manual.** Use only authorized parts and accessories.



## ERROR INDICATORS

SYMBOL	CAUSE	CORRECTION
	Monitor did not detect pulse rate	Remove the arm cuff. Refer to "Applying the arm cuff" on page 13. Wait 2-3 minutes. Take another measurement.
	Cuff under-inflated	Remove the arm cuff. Read, "Taking a Measurement" on page 16.
	Cuff over-inflated	Wait 2-3 minutes. Take another measurement.
	Batteries are worn	Replace the four batteries. Refer to page 8 for battery installation.
	Movement during measurement	Remove the arm cuff. Wait 2-3 minutes. Take another measurement. Remain still during the measurement.

## TROUBLESHOOTING TIPS

PROBLEM	CAUSES AND SOLUTIONS
No power.	Replace worn batteries.
No display appears on the unit.	Check the battery installation for proper placement of the battery polarities.
Measurement values appear too high or too low.	Blood pressure varies constantly. Many factors including stress, time of day, how you wrap the cuff, may affect your blood pressure. Review the sections "Before Taking a Measurement" and "Taking a Measurement".

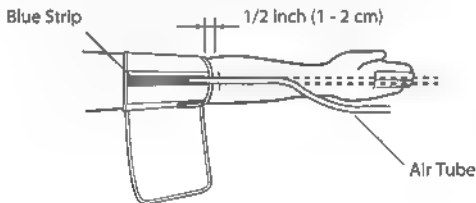
## QUICK REFERENCE GUIDE

To ensure a reliable reading, avoid eating, smoking, and exercising for 30 minutes before taking a measurement. You should try to measure your blood pressure at the same time each day. Avoid taking measurements during stressful times.

1. Remove any tight-fitting clothing from your upper arm.



2. Sit in a chair with your feet flat on the floor and place your arm on a table so the cuff is at the same level as your heart.
3. Apply the arm cuff to your left upper arm. Apply the cuff to your left upper arm so the blue strip is on the inside of your arm and aligned with your middle finger. The air tube runs down the inside of your arm. The bottom of the cuff should be approximately 1/2" above your elbow.



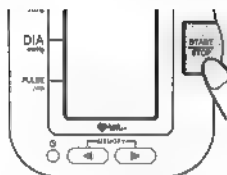
4. Wrap the cuff firmly in place around your arm using the closure strip.

## QUICK REFERENCE GUIDE

5. Press the START/STOP button.

Display symbols appear. The cuff starts to inflate automatically.

Remain still and do not talk during the measurement.



**NOTE:** To stop the inflation or measurement, push the START/STOP button. The monitor will stop inflating, start deflating, and will turn off.

6. When the measurement is complete, the arm cuff completely deflates. Your blood pressure and pulse rate are displayed.



**NOTE:** Wait 2-3 minutes between measurements. The wait time allows the arteries to return to the condition prior to taking the blood pressure measurement. You may need to increase the wait time depending on your individual physiological characteristics.



# FCC STATEMENT

**Note:****POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for U.S.A. only)**

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the product does cause harmful interference to radio or television reception, which can be determined by turning the product on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the product and the receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**POTENTIAL FOR RADIO/TELEVISION INTERFERENCE (for Canada only)**

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Canadian Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", ICES-003 édictée par le ministre des communications.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# WARRANTY INFORMATION

Your HEM-780, IntelliSense Automatic Blood Pressure Monitor, excluding the monitor cuff, is warranted to be free from defects in materials and workmanship appearing within 5 years from the date of purchase, when used in accordance with the instructions provided with the monitor. The monitor cuff is warranted to be free from defects in materials and workmanship appearing within one year from the date of purchase when the monitor is used in accordance with the instructions provided with the monitor. The above warranties extend only to the original retail purchaser.

We will, at our option, repair or replace without charge any monitor or monitor cuff covered by the above warranties. Repair or replacement is our only responsibility and your only remedy under the above warranties.

To obtain warranty service contact Omron Healthcare's Customer Service by calling 1-800-634-4350 for the address of the repair location and the return shipping and handling fee. Information for warranty service is available on our website at [www.omronhealthcare.com](http://www.omronhealthcare.com).

Enclose the Proof of Purchase. Include a letter, with your name, address, phone number, and description of the specific problem. Pack the product carefully to prevent damage in transit. Because of possible loss in transit, we recommend insuring the product with return receipt requested.

**ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THE APPLICABLE WRITTEN WARRANTY ABOVE.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

**OMRON SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER INCIDENTAL, CONSEQUENTIAL OR INDIRECT COSTS, EXPENSES OR DAMAGES.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

## FOR CUSTOMER SERVICE

Visit our web site at:

[www.omronhealthcare.com](http://www.omronhealthcare.com)

Call toll free:

1-800-634-4350

# SPECIFICATIONS

Model:	<b>HEM-780</b>
Display:	LCD Digital Display
Measurement Range:	Pressure: 0 to 299 mmHg, Pulse: 40-180/min.
Accuracy/Calibration:	Pressure: $\pm 3$ mmHg or 2% of reading Pulse: $\pm 5$ % of reading
Inflation:	Automatic by electric pump
Deflation:	Automatic pressure release valve
Rapid Air Release:	Automatic exhaust valve
Pressure Detection:	Capacitive pressure sensor
Measurement Method:	Oscillometric method
Pulse Wave Detection:	Capacitance type pressure sensor
Power Source:	AC Adapter (or 4 "AA" batteries)
Battery Life:	Approx. 1500 uses when used once a day for 2 minutes with 4 new alkaline batteries
Operating Temperature	
/Humidity:	50°F to 104°F (10°C to 40°C) /30 to 90% RH
Storage Temperature	
/Humidity:	-4°F to 140°F (-20°C to 60°C) /10 to 95% RH
Main Unit Weight:	Approximately 12 1/2 oz. (355 g) not including batteries
Main Unit Dimensions:	Approx. 6 3/32" (l) x 5 5/32" (w) x 3 5/16" (h) (155 mm x 131 mm x 84 mm)
Cuff Size:	Approximately 6" (w)(152 mm) Cuff tube 23 5/8" (l) (600 mm)
Cuff Circumference:	Fits arm circumferences 9" to 17" (220mm to 420mm)
Contents:	Main Unit, ComFit™ Cuff, AC Adapter, Instruction Manual, 4 "AA" Batteries and Storage Case
UPC Code:	0 73796 78000 5

**NOTE: These specifications are subject to change without notice.**

Manufactured for:  
**OMRON HEALTHCARE, INC.**  
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Bannockburn, Illinois 60015  
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